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Division of Air Quality

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Title V Operating Permit

PERMIT NUMBER: 5700001001

DATE OF PERMIT: June 24, 2002

Date of Last Revision: June 5, 2003

This Operating Permit is issued to, and applies to the following:

Name of Permittee:

Permitted Location:

Great Salt Lake Minerals Corporation
765 North 10500 West
Ogden, UT 84404-1190

Production Plant
765 N 10500 W
Ogden, UT 84404

UTM coordinates: 4,565,172 meters Northing, 396,986 meters Easting
SIC code: 2819

ABSTRACT

Great Salt Lake Minerals Corporation (GSL) operates a mineral recovery facility on the eastern shore of the south arm of the Great Salt Lake near Ogden, Utah in Weber County. This facility produces sodium chloride (NaCl), sulfate of potash (SOP) (K_2SO_4), and magnesium chloride ($MgCl_2$). The process uses crystallized salts, including halite (sodium chloride) and a mixed salt containing potassium sulfate and magnesium sulfate from solar evaporation ponds. The raw halite is washed, wet-screened, dried, cooled, dry-screened, packaged, and shipped. The mixed salt is washed, slurried, thickened, crystallized, and converted to schoenite, which is then filtered, dried, screened, half granulated/compacted, and shipped as sulfate of potash. The collective pump station operations located on the west side of the Great Salt Lake are not included in this permit since it has been designated as a separate source. GSL is a major source for emissions of PM_{10} .

UTAH AIR QUALITY BOARD

By:

Prepared By:

Richard W. Sprott, Executive Secretary

Tim Andrus

Operating Permit History

6/24/2002 - Permit issued	Action initiated by an initial operating permit application	
2/18/2003 -Permit modified	Action initiated by an administrative amendment (initiated by DAQ)	Modification to increase hourly maximum of dry salt produced in the salt plant dryer from 100 TPH to 120 TPH. Salt plant dryer (D-500) wet cyclone and wet scrubber stack (AH-513) PM ₁₀ emissions limit was also changed.
6/5/2003 -Permit modified	Action initiated by an administrative amendment (initiated by DAQ)	To change equipment from wet scrubber AH-054 in SOP Compaction Building Circuit to baghouse BH-005, as approved in AN0917020-03 (4/2/03). New PM ₁₀ limits and associated stack testing were added. Opacity limit on point changed from 40% to 10%. Installation notice requirement for BH-501 was removed, as the requirement has been met.

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Issued under authority of Utah Code Ann. Section 19-2-104 and 19-2-109.1, and in accordance with Utah Administrative Code R307-415 Operating Permit Requirements.

All definitions, terms and abbreviations used in this permit conform to those used in Utah Administrative Code R307-101 and R307-415 (Rules), and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the Rules.

Where a permit condition in Section I, General Provisions, partially recites or summarizes an applicable rule, the full text of the applicable portion of the rule shall govern interpretations of the requirements of the rule. In the case of a conflict between the Rules and the permit terms and conditions of Section II, Special Provisions, the permit terms and conditions of Section II shall govern except as noted in Provision I.M, Permit Shield.

Section I: General Provisions

I.A. Federal Enforcement.

All terms and conditions in this permit, including those provisions designed to limit the potential to emit, are enforceable by the EPA and citizens under the Clean Air Act of 1990 (CAA) except those terms and conditions that are specifically designated as "State Requirements". (R307-415-6b)

I.B. Permitted Activity(ies).

Except as provided in R307-415-7b(1), the permittee may not operate except in compliance with this permit. (See also Provision I.E, Application Shield)

I.C. Duty to Comply.

I.C.1 The permittee must comply with all conditions of the operating permit. Any permit noncompliance constitutes a violation of the Air Conservation Act and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (R307-415-6a(6)(a))

I.C.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (R307-415-6a(6)(b))

I.C.3 The permittee shall furnish to the Executive Secretary, within a reasonable time, any information that the Executive Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Executive Secretary copies of records required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. (R307-415-6a(6)(e))

I.C.4 This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance shall not stay

any permit condition, except as provided under R307-415-7f(1) for minor permit modifications. (R307-415-6a(6)(c))

I.D. Permit Expiration and Renewal.

I.D.1 **This permit is issued for a fixed term of five years and expires on June 24, 2007.** (R307-415-6a(2))

I.D.2 Application for renewal of this permit is due by December 24, 2006. An application may be submitted early for any reason. (R307-415-5a(1)(c))

I.D.3 An application for renewal submitted after the due date listed in I.D.2 above shall be accepted for processing, but shall not be considered a timely application and shall not relieve the permittee of any enforcement actions resulting from submitting a late application. (R307-415-5a(5))

I.D.4 Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted consistent with R307-415-7b (see also Provision I.E, Application Shield) and R307-415-5a(1)(c) (see also Provision I.D.2). (R307-415-7c(2))

I.E. Application Shield.

If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit will not be a violation of R307-415, until the Executive Secretary takes final action on the permit renewal application. In such case, the terms and conditions of this permit shall remain in force until permit renewal or denial. This protection shall cease to apply if, subsequent to the completeness determination required pursuant to R307-415-7a(3), and as required by R307-415-5a(2), the applicant fails to submit by the deadline specified in writing by the Executive Secretary any additional information identified as being needed to process the application. (R307-415-7b(2))

I.F. Severability.

In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force. (R307-415-6a(5))

I.G. Permit Fee.

I.G.1 The permittee shall pay an annual emission fee to the Executive Secretary consistent with R307-415-9. (R307-415-6a(7))

I.G.2 The emission fee shall be due on October 1 of each calendar year or 45 days after the source receives notice of the amount of the fee, whichever is later. (R307-415-9(4)(a))

I.H. No Property Rights.

This permit does not convey any property rights of any sort, or any exclusive privilege. (R307-415-6a(6)(d))

I.I. Revision Exception.

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (R307-415-6a(8))

I.J. Inspection and Entry.

I.J.1 Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Executive Secretary or an authorized representative to perform any of the following:

I.J.1.a Enter upon the permittee's premises where the source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit. (R307-415-6c(2)(a))

I.J.1.b Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit. (R307-415-6c(2)(b))

I.J.1.c Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. (R307-415-6c(2)(c))

I.J.1.d Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements. (R307-415-6c(2)(d))

I.J.2 Any claims of confidentiality made on the information obtained during an inspection shall be made pursuant to Utah Code Ann. Section 19-1-306. (R307-415-6c(2)(e))

I.K. Certification.

Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification as to its truth, accuracy, and completeness, by a responsible official as defined in R307-415-3. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R307-415-5d)

I.L. Compliance Certification.

I.L.1 Permittee shall submit to the Executive Secretary an annual compliance certification, certifying compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall be submitted no later than **June 24, 2003** and that date each year following until this permit expires. The certification shall include all the following (permittee may cross-reference this permit or previous reports): (R307-415-6c(5))

I.L.1.a The identification of each term or condition of this permit that is the basis of the certification;

I.L.1.b The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such

methods and other means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;

- I.L.1.c The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in Provision I.L.1.b. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and
- I.L.1.d Such other facts as the Executive Secretary may require to determine the compliance status.
- I.L.2 The permittee shall also submit all compliance certifications to the EPA, Region VIII, at the following address or to such other address as may be required by the Executive Secretary: (R307-415-6c(5)(d))

Office of Enforcement, Compliance and Environmental Justice
(mail code 8ENF)
EPA, Region VIII
999 18th Street, Suite 300
Denver, CO 80202-2466

I.M. Permit Shield.

- I.M.1 Compliance with the provisions of this permit shall be deemed compliance with any applicable requirements as of the date of this permit, provided that:
- I.M.1.a Such applicable requirements are included and are specifically identified in this permit, or (R307-415-6f(1)(a))
- I.M.1.b Those requirements not applicable to the source are specifically identified and listed in this permit. (R307-415-6f(1)(b))
- I.M.2 Nothing in this permit shall alter or affect any of the following:
- I.M.2.a The emergency provisions of Utah Code Ann. Section 19-1-202 and Section 19-2-112, and the provisions of the CAA Section 303. (R307-415-6f(3)(a))
- I.M.2.b The liability of the owner or operator of the source for any violation of applicable requirements under Utah Code Ann. Section 19-2-107(2)(g) and Section 19-2-110 prior to or at the time of issuance of this permit. (R307-415-6f(3)(b))
- I.M.2.c The applicable requirements of the Acid Rain Program, consistent with the CAA Section 408(a). (R307-415-6f(3)(c))

I.M.2.d The ability of the Executive Secretary to obtain information from the source under Utah Code Ann. Section 19-2-120, and the ability of the EPA to obtain information from the source under the CAA Section 114. (R307-415-6f(3)(d))

I.N. Emergency Provision.

I.N.1 An “emergency” is any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. (R307-415-6g(1))

I.N.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the affirmative defense is demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

I.N.2.a An emergency occurred and the permittee can identify the causes of the emergency. (R307-415-6g(3)(a))

I.N.2.b The permitted facility was at the time being properly operated. (R307-415-6g(3)(b))

I.N.2.c During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in this permit. (R307-415-6g(3)(c))

I.N.2.d The permittee submitted notice of the emergency to the Executive Secretary within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirement of Provision I.S.2.c below. (R307-415-6g(3)(d))

I.N.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. (R307-415-6g(4))

I.N.4 This emergency provision is in addition to any emergency or upset provision contained in any other section of this permit. (R307-415-6g(5))

I.O. Operational Flexibility.

Operational flexibility is governed by R307-415-7d(1).

I.P. Off-permit Changes.

Off-permit changes are governed by R307-415-7d(2).

I.Q. Administrative Permit Amendments.

Administrative permit amendments are governed by R307-415-7e.

I.R. **Permit Modifications.**

Permit modifications are governed by R307-415-7f.

I.S. **Records and Reporting.**

I.S.1 Records.

I.S.1.a The records of all required monitoring data and support information shall be retained by the permittee for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-charts or appropriate recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. (R307-415-6a(3)(b)(ii))

I.S.1.b For all monitoring requirements described in Section II, Special Provisions, the source shall record the following information, where applicable: (R307-415-6a(3)(b)(i))

I.S.1.b.1 The date, place as defined in this permit, and time of sampling or measurement.

I.S.1.b.2 The date analyses were performed.

I.S.1.b.3 The company or entity that performed the analyses.

I.S.1.b.4 The analytical techniques or methods used.

I.S.1.b.5 The results of such analyses.

I.S.1.b.6 The operating conditions as existing at the time of sampling or measurement.

I.S.1.c Additional record keeping requirements, if any, are described in Section II, Special Provisions.

I.S.2 Reports.

I.S.2.a Monitoring reports shall be submitted to the Executive Secretary every six months, or more frequently if specified in Section II. All instances of deviation from permit requirements shall be clearly identified in the reports. (R307-415-6a(3)(c)(i))

I.S.2.b All reports submitted pursuant to Provision I.S.2.a shall be certified by a responsible official in accordance with Provision I.K of this permit. (R307-415-6a(3)(c)(i))

I.S.2.c The Executive Secretary shall be notified promptly of any deviations from permit requirements including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. **Prompt, as used in this condition, shall be defined as written notification within 14 days.** Deviations from permit requirements due to unavoidable breakdowns shall be reported in accordance with the provisions of R307-107. (R307-415-6a(3)(c)(ii))

I.S.3 Notification Addresses.

I.S.3.a All reports, notifications, or other submissions required by this permit to be submitted to the Executive Secretary are to be sent to the following address or to such other address as may be required by the Executive Secretary:

Utah Division of Air Quality
P.O. Box 144820
Salt Lake City, UT 84114-4820
Phone: 801-536-4000

I.S.3.b All reports, notifications or other submissions required by this permit to be submitted to the EPA should be sent to one of the following addresses or to such other address as may be required by the Executive Secretary:

For annual compliance certifications

Environmental Protection Agency, Region VIII
Office of Enforcement, Compliance and
Environmental Justice (mail code 8ENF)
999 18th Street, Suite 300
Denver, CO 80202-2466

For reports, notifications, or other correspondence
related to permit modifications, applications, etc.

Environmental Protection Agency, Region VIII
Office of Partnerships & Regulatory Assistance
Air & Radiation Program (mail code 8P-AR)
999 18th Street, Suite 300
Denver, CO 80202-2466
Phone: 303-312-6440

I.T. **Reopening for Cause.**

I.T.1 A permit shall be reopened and revised under any of the following circumstances:

I.T.1.a New applicable requirements become applicable to the permittee and there is a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the terms and conditions of this permit have been extended pursuant to R307-415-7c(3), application shield. (R307-415-7g(1)(a))

I.T.1.b The Executive Secretary or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (R307-415-7g(1)(c))

I.T.1.c EPA or the Executive Secretary determines that this permit must be revised or revoked to assure compliance with applicable requirements. (R307-415-7g(1)(d))

I.T.1.d Additional applicable requirements are to become effective before the renewal date of this permit and are in conflict with existing permit conditions. (R307-415-7g(1)(e))

I.T.2 Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. (R307-415-7g(2))

I.U. **Inventory Requirements.**

I.U.1 An emission inventory shall be submitted in accordance with the procedures of R307-150, Emission Inventories. (R307-150)

I.U.2 A Hazardous Air Pollutant Inventory shall be submitted in accordance with the procedures of R307-155, Hazardous Air Pollutant Inventory. (R307-155)

Section II: SPECIAL PROVISIONS

II.A. Emission Unit(s) Permitted to Discharge Air Contaminants.

(R307-415-4(3)(a) and R307-415-4(4))

II.A.1 Salt Plant (designated as Unit SALT)

Unit Description: Salt production plant consisting of the salt screen cooler circuit, salt sizing screen & storage circuit, salt special products circuit, and salt dryer system (D-500).

II.A.2 Salt Cooler Circuit (designated as Unit AH-500)

Unit Description: Salt cooling circuit ancillary equipment with exhaust directed into a cyclonic wet scrubber (AH-500).

II.A.3 Salt Plant Circuit (designated as Unit AH-502)

Unit Description: Salt plant circuit with dried salt fed to screens, surge bins, bagging operations and conveyed to truck and railcar loadout areas. Exhaust is directed into a cyclonic wet scrubber (AH-502).

II.A.4 Salt Special Products Circuit (designated as Unit AH-505)

Unit Description: Salt plant special products circuit consisting of compaction of dried salt and pre-mixed mineral powder into blocks. Exhaust is directed into a cyclonic wet scrubber (AH-505).

II.A.5 Salt Dryer (designated as Unit AH-513)

Unit Description: Salt plant natural gas fired dryer (D-500) with exhaust directed into a wet cyclone and cyclonic wet scrubber (AH-513).

II.A.6 SOP Dryer (D-003) (designated as Unit AH-013)

Unit Description: SOP plant natural gas fired dryer (D-003) with exhaust directed into a dry cyclone circuit and cyclonic wet scrubber (AH-013). This unit was installed prior to 1969. No unit-specific applicable requirements.

II.A.7 SOP Compaction Building Circuit (designated as Unit BH-005)

Unit Description: SOP Compaction, screening, crushing and conveyor transfer points vented to a dry cyclone circuit and pulse-jet baghouse (BH-005, new 2003).

II.A.8 SOP Compaction Circuit Dryers (D-002 & D-004) (designated as Unit AH-081)

Unit Description: SOP plant compaction circuit consisting of tray-type dryer (D-002) and rotary kiln dryer (D-004), both natural-gas fired, with exhaust directed into a dry cyclone circuit and cyclonic wet scrubber (AH-081).

II.A.9 SOP Dryer (D-001) (designated as Unit HE-028)

Unit Description: SOP wet process plant natural gas fired dryer (D-001) with exhaust directed into a dry cyclone circuit and a heat reclaimer packed tower (HE-028).

II.A.10 SOP Bulk Load-Out Circuit (designated as Unit BH-001)

Unit Description: SOP bulk load-out area with exhaust from the handling and transfer of material directed into a fabric filter dust collector (BH-001).

II.A.11 SOP Silo Storage Circuit (designated as Unit BH-002)

Unit Description: SOP silo storage building activities with exhaust directed into a fabric filter dust collector (BH-002).

II.A.12 SOP Submerged Combustion Process (designated as Unit SUB-COMP)

Unit Description: SOP plant submerged combustion system consisting of a water process tank and four (4) natural gas fired burners. No unit-specific applicable requirements.

II.A.13 Abrasive Blast Machine (designated as Unit BLAST)

Unit Description: Self contained abrasive blast machine.

- II.A.14 **Potassium Chloride Conveyor System**(designated as Unit KCL)
Unit Description: Potassium Chloride transfer system consisting of railcar unloading and four (4) covered conveyor belts. No unit-specific applicable requirements.
- II.A.15 **SOP Compaction Plant Pneumatic Conveying** (designated as Unit BH-003)
Unit Description: SOP pneumatic conveying system within the compaction building. Exhaust from the system is directed into a fabric filter dust collector (BH-003) then vented back into the building. Unit is listed for informational purposes only.
- II.A.16 **Salt Cooler** (designated as Unit BH-501)
Unit Description: Salt cooler (F-506) with exhaust directed into a fabric filter dust collector (BH-501). Dust collector exhaust air will be diverted either into the building, dryer (D-501) combustion air, or salt cooler (F-506) fluidized cooler air. No unit-specific applicable requirements.
- II.A.17 **SOP Conveyor Transfer in Tunnels** (designated as Unit BH-004)
Unit Description: SOP conveyor transfer and drop points in tunnels underneath silos with exhaust directed into a fabric filter dust collector (BH-004). Baghouse exhaust is vented back into the building. Unit is listed for informational purposes only.
- II.A.18 **Emergency Diesel Generator** (designated as Unit GENSET)
Unit Description: Stand-by generator to be used under emergency situations.
- II.A.19 **Roads and Unpaved Operational Areas** (designated as Unit ROADS)
Unit Description: Various roads and disturbed, unpaved areas.
- II.A.20 **Petroleum Storage Tanks** (designated as Unit TANKS)
Unit Description: one 6,000 gal. Gasoline, one 12,000 gal. Diesel and four 10,000 gal. Diesel above ground storage tanks. No unit-specific applicable requirements.
- II.A.21 **Miscellaneous Emissions** (designated as Unit MISC)
Unit Description: Emission sources listed for informational purposes only such as: main office boiler, laboratory fume hoods, comfort heaters, cooling towers, pallet plant operations, degreasing stations and air ventilation systems. No unit-specific applicable requirements.

II.B. **Requirements and limitations.**

The following emission limitations, standards, and operational limitations apply to the permitted facility as indicated: (R307-415-6a(1))

II.B.1 **Conditions on permitted source (Source-wide)**

II.B.1.a **Condition:**

The permittee shall comply with the applicable requirements for recycling and emission reduction for class I and class II refrigerants pursuant to 40 CFR 82, Subpart F - Recycling and Emissions Reduction. [Authority granted under 40 CFR 82.150(b); condition originated in 40 CFR 82]

II.B.1.a.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart F.

II.B.1.a.2 **Recordkeeping:**

All records required in 40 CFR 82, Subpart F shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

II.B.1.a.3

Reporting:

All reports required in 40 CFR 82, Subpart F shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

II.B.1.b

Condition:

The permittee shall comply with the applicable requirements for servicing of motor vehicle air conditioners pursuant to 40 CFR 82, Subpart B - Servicing of Motor Vehicle Air Conditioners. [Authority granted under 40 CFR 82.30(b); condition originated in 40 CFR 82]

II.B.1.b.1

Monitoring:

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart B.

II.B.1.b.2

Recordkeeping:

All records required in 40 CFR 82, Subpart B shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

II.B.1.b.3

Reporting:

All reports required in 40 CFR 82, Subpart B shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

II.B.1.c

Condition:

The permittee shall use only natural gas for fuel for all burners. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.1.c.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.1.c.2

Recordkeeping:

An operating log will be maintained to document any period when plant equipment is operated using any fuel other than natural gas.

II.B.1.c.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.d

Condition:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected emission units, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Authority granted under R307-401-5; condition originated in DAQE-AN0917020-03]

- II.B.1.d.1 **Monitoring:**
Records required for this permit condition will serve as monitoring.
- II.B.1.d.2 **Recordkeeping:**
Permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with Provision I.S.1 of this permit.
- II.B.1.d.3 **Reporting:**
There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.1.e **Condition:**
Visible emissions shall be no greater than 20 percent opacity, unless otherwise specified in this permit. [Authority granted under R307-305-1(1); condition originated in DAQE-AN0917020-03]
- II.B.1.e.1 **Monitoring:**
Unless otherwise specified, a visual opacity survey of each affected emission unit shall be performed on a monthly basis while the unit is operating. Permittee is not required to perform monthly surveys on natural gas combustion sources and petroleum storage tanks. The visual opacity survey shall be performed by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than condensed water vapor are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9 for point sources, and in accordance 58 FR 61640 Method 203A for fugitive sources.
- II.B.1.e.2 **Recordkeeping:**
A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit.

If an opacity determination is indicated, all data required by 40 CFR 60, Appendix A, Method 9 and/or 58 FR 61640 Method 203A shall be maintained in accordance with Provision I.S.1 of this permit.
- II.B.1.e.3 **Reporting:**
There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.1.f **Condition:**
Sulfur content of any fuel oil or diesel burned shall be no greater than 0.5 percent by weight. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]
- II.B.1.f.1 **Monitoring:**
For each delivery of fuel oil or diesel, the permittee shall either:

(1) Determine the fuel sulfur content expressed as wt% in accordance with the methods of the American Society for Testing Materials (ASTM); or

(2) Inspect the fuel sulfur content expressed as wt% determined by the vendor using methods of the ASTM; or

(3) Inspect documentation provided by the vendor that demonstrates compliance with this provision (directly or indirectly).

II.B.1.f.2

Recordkeeping:

The records required for monitoring shall be maintained as described by Provision S.1 in Section I of this permit.

II.B.1.f.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2

Conditions on Salt Plant (Unit SALT)

II.B.2.a

Condition:

Production of dried salt shall be no greater than 800000 tons per 12-month rolling period. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.2.a.1

Monitoring:

Production shall be determined using an operations log. Production shall be monitored on a daily basis. Annual production shall be determined within the first 20 calendar days of each month, for the previous month, using the daily operations logs or records. The total shall then be added to the previous 11 months total for a 12-month rolling total. Any adjustments to the total shall be fully explained and justified.

II.B.2.a.2

Recordkeeping:

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.2.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.3

Conditions on Salt Cooler Circuit (Unit AH-500)

II.B.3.a

Condition:

Emissions of PM₁₀ shall be no greater than 7.65 pounds per hour and 0.020 grains/dscf (68 degrees F, and 29.92 in Hg). [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.3.a.1

Monitoring:

Stack testing shall be performed as specified below:

(a) Frequency. Emissions shall be tested every three years, based on the date of the most recent stack test. The source may also be tested at any time if directed by the Executive Secretary.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

(2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.

(3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM_{10} .

(4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

(d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.3.a.2

Recordkeeping:

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.3.a.3

Reporting:

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.4

Conditions on Salt Plant Circuit (Unit AH-502)

II.B.4.a

Condition:

Emissions of PM₁₀ shall be no greater than 5.24 pounds per hour and 0.040 grains/dscf (68 degrees F, and 29.92 in Hg). [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.4.a.1

Monitoring:

Stack testing shall be performed as specified below:

(a) Frequency. Emissions shall be tested every three years, based on the date of the most recent stack test. The source may also be tested at any time if directed by the Executive Secretary.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

(2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.

(3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM₁₀.

(4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

(d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.4.a.2

Recordkeeping:

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.4.a.3

Reporting:

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.5

Conditions on Salt Special Products Circuit (Unit AH-505)

II.B.5.a

Condition:

Emissions of PM₁₀ shall be no greater than 2.16 pounds per hour and 0.040 grains/dscf (68 degrees F, and 29.92 in Hg). [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.5.a.1

Monitoring:

Stack testing shall be performed as specified below:

(a) Frequency. Emissions shall be tested every three years, based on the date of the most recent stack test. The source may also be tested at any time if directed by the Executive Secretary.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

(2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.

(3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM₁₀.

(4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

(d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.5.a.2

Recordkeeping:

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.5.a.3

Reporting:

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.6

Conditions on Salt Dryer (Unit AH-513)

II.B.6.a

Condition:

Production of dried salt shall be no greater than 120 tons per hour. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.6.a.1

Monitoring:

Production shall be determined using measured weigh scale tonnages. Production shall be monitored on an hourly basis for all periods that the plant is in operation.

II.B.6.a.2

Recordkeeping:

Records shall be kept on a daily basis for determination of hourly/daily rates. Records shall be kept in accordance with Provision I.S.1 of this permit

II.B.6.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.6.b

Condition:

Emissions of PM₁₀ shall be no greater than 1.45 pounds per hour and 0.0114 grains/dscf (68 degrees F, and 29.92 in Hg). [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.6.b.1

Monitoring:

Stack testing shall be performed as specified below:

(a) Frequency. Emissions shall be tested every three years, based on the date of the most recent stack test. The source may also be tested at any time if directed by the Executive Secretary.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

(2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.

(3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM_{10} .

(4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

(d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.6.b.2

Recordkeeping:

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.6.b.3

Reporting:

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.7 **Conditions on SOP Dryer (D-003) (Unit AH-013)**

II.B.7.a **Condition:**

Visible emissions shall be no greater than 40 percent opacity. [Authority granted under R307-305-1(1); condition originated in DAQE-AN0917020-03]

II.B.7.a.1 **Monitoring:**

A visual opacity survey of each affected emission unit shall be performed on a monthly basis by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than steam are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.7.a.2 **Recordkeeping:**

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9 shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.7.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.8 **Conditions on SOP Compaction Building Circuit (Unit BH-005)**

II.B.8.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.8.a.1 **Monitoring:**

A visual opacity survey of each affected emission unit shall be performed on a monthly basis by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than steam are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.8.a.2 **Recordkeeping:**

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9 shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.8.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.8.b

Condition:

Emissions of PM₁₀ shall be no greater than 0.9 pounds per hour and 0.01 grains/dscf (68 degrees F, and 29.92 in Hg). [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.8.b.1

Monitoring:

Stack testing shall be performed as specified below:

(a) Frequency. The first test shall be conducted 180 days after start-up. After the first test, a test shall be conducted at least once every 5 years unless the affected emission unit was not operated during the 5 year period.

(b) Notification. At least 30 days prior to conducting the test, the permittee shall notify the Executive Secretary of the date, time, and place of testing. A copy of the test protocol shall be provided with the notification. The permittee and tester shall attend a pretest conference at least 30 days prior to the test if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.

(2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201A. 40 CFR 51, Appendix M, Method 202 shall be used to determine condensibles.

(3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM₁₀.

(4) The condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

(d) Calculations. To determine mass emission rates (lb/hr) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors.

(e) Test Conditions. Testing shall be at no less than 90% of the production rate achieved in the previous three years. During the tests, the source shall maintain process conditions representative of normal operations.

II.B.8.b.2

Recordkeeping:

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.8.b.3

Reporting:

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.8.c

Condition:

The permittee shall notify the Executive Secretary in writing when the installation of new equipment in the affected unit has been completed and is operational, as an initial compliance inspection if required. To ensure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section. [Authority granted under R307-401-11; condition originated in DAQE-AN0917020-03]

II.B.8.c.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.8.c.2

Recordkeeping:

As applicable, the permittee shall maintain a copy of each notification required by this permit condition in accordance with Provision I.S.1 of this permit.

II.B.8.c.3

Reporting:

In addition to the reporting requirements specified in Section I of this permit, the permittee shall notify the Executive Secretary in writing eighteen months after the issuance date of the subject approval order if construction, installation, modification, relocation or establishment is not complete. The notification shall document the status of construction, installation, modification, relocation or establishment and provide a schedule for installation, modification, relocation or establishment. The permittee shall also notify the Executive Secretary in writing when the affected process unit is operational.

II.B.9

Conditions on SOP Compaction Circuit Dryers (D-002 & D-004) (Unit AH-081)

II.B.9.a

Condition:

Emissions of PM₁₀ shall be no greater than 43 pounds per hour. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.9.a.1

Monitoring:

Stack testing shall be performed as specified below:

(a) Frequency. Emissions shall be tested every three years, based on the date of the most recent stack test. The source may also be tested at any time if directed by the Executive Secretary.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

(2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.

(3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM_{10} .

(4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

(d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.9.a.2

Recordkeeping:

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.9.a.3

Reporting:

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.10

Conditions on SOP Dryer (D-001) (Unit HE-028)

II.B.10.a

Condition:

Emissions of PM_{10} shall be no greater than 40 pounds per hour. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.10.a.1

Monitoring:

Stack testing shall be performed as specified below:

(a) Frequency. Emissions shall be tested every three years, based on the date of the most recent stack test. The source may also be tested at any time if directed by the Executive Secretary.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

(2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.

(3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM_{10} .

(4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

(d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.10.a.2

Recordkeeping:

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.10.a.3

Reporting:

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.11

Conditions on SOP Bulk Load-Out Circuit (Unit BH-001)

II.B.11.a

Condition:

Emissions of PM₁₀ shall be no greater than 1.64 pounds per hour and 0.01 grains/dscf (68 degrees F, and 29.92 in Hg). [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.11.a.1

Monitoring:

Stack testing shall be performed as specified below:

(a) Frequency. Emissions shall be tested every five years, based on the date of the most recent stack test. The source may also be tested at any time if directed by the Executive Secretary.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) approved access shall be provided to the test location.

(2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.

(3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM₁₀.

(4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

(d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.11.a.2

Recordkeeping:

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.11.a.3

Reporting:

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.11.b

Condition:

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.11.b.1

Monitoring:

A visual opacity survey of each affected emission unit shall be performed on a monthly basis by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than steam are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.11.b.2

Recordkeeping:

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9 shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.11.b.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.11.c

Condition:

Sulfate of Potash loading rate shall be no greater than 300 tons per hour and no greater than 5,600 hours per rolling 12-month period. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.11.c.1

Monitoring:

Sulfate of Potash loading rate and hours shall be determined using an operations log. Production shall be monitored on an hourly basis. Annual hours of operation shall be determined within the first 20 calendar days of each month, for the previous month, using operations logs or records. The total shall then be added to the previous 11 months total for a 12-month rolling total. Any adjustments to the total shall be fully explained and justified.

II.B.11.c.2

Recordkeeping:

Records of production and hours shall be kept for all periods of operation. Records shall be kept on a daily basis for determination of hourly limit with

monthly totals for determination of annual rolling totals. Records shall be kept in accordance with Provision I.S.1 of this permit

II.B.11.c.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.12

Conditions on SOP Silo Storage Circuit (Unit BH-002)

II.B.12.a

Condition:

Emissions of PM₁₀ shall be no greater than 1.37 pounds per hour and 0.01 grains/dscf (68 degrees F, and 29.92 in Hg). [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.12.a.1

Monitoring:

Stack testing shall be performed as specified below:

(a) Frequency. Emissions shall be tested every five years, based on the date of the most recent stack test. The source may also be tested at any time if directed by the Executive Secretary.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) approved access shall be provided to the test location.

(2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.

(3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM₁₀.

(4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

(d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors

determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.12.a.2

Recordkeeping:

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.12.a.3

Reporting:

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.12.b

Condition:

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.12.b.1

Monitoring:

A visual opacity survey of each affected emission unit shall be performed on a monthly basis by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than steam are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.12.b.2

Recordkeeping:

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9 shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.12.b.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.13

Conditions on Abrasive Blast Machine (Unit BLAST)

II.B.13.a

Condition:

Visible emissions shall not exceed 40 percent opacity for more than three minutes in any one hour if the permittee is complying with one of the performance standards listed below.

(a) Any abrasive blasting operation may use at least one of the following performance standards:

- (1) Confined blasting;
- (2) Wet abrasive blasting;
- (3) Hydroblasting; or
- (4) Unconfined blasting using abrasives as defined in paragraph (b).

(b) Abrasives used for dry unconfined blasting referenced in paragraph (a)(4) above shall comply with the following performance standards:

- (1) Before blasting the abrasive shall not contain more than 1% by weight material passing a #70 U.S. Standard sieve.
- (2) After blasting the abrasive shall not contain more than 1.8% by weight material 5 micron or smaller.
- (3) Abrasives reused for dry unconfined blasting are exempt from paragraph (b)(2), but must conform with paragraph (b)(1).

(c) Sources using the performance standard of paragraph (a)(4) must demonstrate that the abrasives were obtained from persons that have certified (submitted test results) to the executive secretary at least annually that such abrasives meet the requirements of paragraph (b) above (ref. R307-206.). [Authority granted under R307-206; condition originated in DAQE-AN0917020-03]

II.B.13.a.1

Monitoring:

Visible emission evaluation of abrasive blasting operations shall be conducted semi-annually using EPA Method 9, "Visual Determination of Opacity of Emissions from Stationary Sources," 40 CFR Part 60, Appendix A and in accordance with the following provisions:

a. Emissions from unconfined blasting shall be read at the densest point of the emission after a major portion of the spent abrasive has fallen out, at a point not less than five feet nor more than twenty-five feet from the impact surface from any single abrasive blasting nozzle.

b. Emissions from unconfined blasting employing multiple nozzles shall be judged as a single source unless it can be demonstrated by the owner or operator that each nozzle, evaluated separately, meets the emission and performance standards described in this permit condition.

c. Emissions from confined blasting shall be read at the densest point after the air contaminant leaves the enclosure.

II.B.13.a.2

Recordkeeping:

Results from opacity observations (EPA Method 9) shall be recorded and maintained in accordance with Provision S.1 in Section I of this permit.

II.B.13.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.14

Conditions on Salt Cooler (Unit BH-501)

II.B.14.a

Condition:

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.14.a.1

Monitoring:

A visual opacity survey of each affected emission unit shall be performed on a monthly basis by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than steam are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.14.a.2

Recordkeeping:

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9 shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.14.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.14.b

Condition:

Emissions of PM₁₀ shall be no greater than 0.9 pounds per hour and 0.01 grains/dscf (68 degrees F, and 29.92 in Hg). [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.14.b.1

Monitoring:

Stack testing shall be performed as specified below:

(a) Frequency. The first test shall be conducted 180 days after start-up. After the first test, a test shall be conducted at least once every 5 years unless the affected emission unit was not operated during the 5 year period.

(b) Notification. At least 30 days prior to conducting the test, the permittee shall notify the Executive Secretary of the date, time, and place of testing. A copy of the test protocol shall be provided with the notification. The permittee and tester shall attend a pretest conference at least 30 days prior to the test if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.

(2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201A. 40 CFR 51, Appendix M, Method 202 shall be used to determine condensibles.

(3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A,

Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM₁₀.

(4) The condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

(d) Calculations. To determine mass emission rates (lb/hr) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors.

(e) Test Conditions. Testing shall be at no less than 90% of the production rate achieved in the previous three years. During the tests, the source shall maintain process conditions representative of normal operations.

II.B.14.b.2

Recordkeeping:

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.14.b.3

Reporting:

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.15

Conditions on Emergency Diesel Generator (Unit GENSET)

II.B.15.a

Condition:

Hours of operation for maintenance firing purposes PM₁₀ shall be no greater than 30 hours per rolling 12-month period. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.15.a.1

Monitoring:

By the 20th day of each month, the permittee shall calculate the total hours of operation in the previous 12 months for maintenance firing purposes for each affected emission unit. Hours of operation for each affected emission unit shall be determined by an hour meter and/or a log.

II.B.15.a.2

Recordkeeping:

Records of hours of operation for maintenance firing purposes shall be kept on a monthly basis. Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.15.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.15.b

Condition:

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.15.b.1

Monitoring:

A visual opacity survey of each affected emission unit shall be performed on a monthly basis by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than steam are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.15.b.2

Recordkeeping:

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9 shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.15.b.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.16

Conditions on Roads and Unpaved Operational Areas (Unit ROADS)

II.B.16.a

Condition:

Visible emissions shall be no greater than 20 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN0917020-03]

II.B.16.a.1

Monitoring:

Within six months of issuance of this permit, the permittee shall develop and implement a fugitive dust control plan, approved by the Executive Secretary, that minimizes fugitive dust. The permittee shall perform monitoring as described in the fugitive dust control plan.

II.B.16.a.2

Recordkeeping:

Records required by the most recently approved fugitive dust control plan shall be maintained in accordance with the plan and section I.S.1 of this permit.

II.B.16.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.C. **Emissions Trading.**

(R307-415-6a(10))

Not applicable to this source.

II.D. **Alternative Operating Scenarios.**

(R307-415-6a(9))

Not applicable to this source.

Section III: PERMIT SHIELD

The following requirements have been determined to be not applicable to this source in accordance with Provision I.M, Permit Shield:

III.A. 40 CFR Subpart OOO (Standards of Performance for Nonmetallic mineral processing plants)

This regulation is not applicable to the permitted source (Source-wide) because the only material processed by the facility which is subject to 40 CFR Subpart OOO is sodium chloride, however, all affected facilities commenced construction, reconstruction or modification prior to August 31, 1983.

Section IV: ACID RAIN PROVISIONS.

This source is not subject to Title IV. This section is not applicable.

REVIEWER COMMENTS

This operating permit incorporates all applicable requirements contained in the following documents:

DAQE-AN0917020-03

dated April 02, 2003

1. Comment on an item originating in 40 CFR 60.11b(a), Subpart Kb regarding Petroleum Storage Tanks (Unit TANKS)

Petroleum storage tanks not subject to NSPS Subpart Kb: The 12,000 gal. Diesel storage tank is not subject to NSPS, Subpart Kb because it was installed prior to July 23, 1984. All other petroleum storage tanks are not subject to NSPS, Subpart Kb due to size (less than 10,566 gal). [Comment last updated on 12/10/2001]

2. Comment on an item originating in DAQE-AN0917020-03 regarding Salt Cooler (Unit BH-501)

Baghouse test frequency for PM₁₀: A test frequency of five years has been specified for this baghouse due to a low potential for noncompliance with the PM₁₀ limit. The low potential is due to the low particulate loading indicative of a low potential to emit (PTE) from this unit. This unit has a PTE of 3.9 tons per year. This is based on the 0.9 lb/hr emission limit and 8,760 hours of operation per year. [Comment last updated on 5/05/2003]

3. Comment on an item originating in DAQE-AN0917020-03 regarding SOP Bulk Load-Out Circuit (Unit BH-001)

Baghouse test frequency for PM₁₀: A test frequency of five years has been specified for this baghouse due to a low potential for noncompliance with the PM₁₀ limit. The low potential is due to the low particulate loading indicative of a low potential to emit (PTE) from this unit. This unit has a PTE of 4.6 tons per year. This is based on the 1.64 lb/hr emission limit and 5,600 hours of operation per year. [Comment last updated on 5/05/2003]

4. Comment on an item originating in DAQE-AN0917020-03 regarding SOP Silo Storage Circuit (Unit BH-002)

Baghouse test frequency of PM₁₀: A test frequency of five years has been specified for this baghouse due to a low potential for noncompliance with the PM₁₀ limit. The low potential is due to the low particulate loading indicative of a low potential to emit (PTE) from this unit. This unit has a PTE of 6.0 tons per year. This is based on the 1.37 lb/hr emission limit and 8,760 hours of operation per year. [Comment last updated on 5/05/2003]

5. Comment on an item originating in DAQE-AN0917020-03 regarding Roads and Unpaved Operational Areas (Unit ROADS)

Requirement to demonstrate compliance with opacity using a modified Method 9: Permittee has requested that they be allowed to submit a fugitive dust control plan to

satisfy the requirement of regular modified Method 9 observations. [Comment last updated on 5/05/2003]

6. Comment on an item originating in DAQE-AN0917020-03 regarding SOP Compaction Building Circuit (Unit BH-005)

Baghouse test frequency for PM₁₀: A test frequency of five years has been specified for this baghouse due to a low potential for noncompliance with the PM₁₀ limit. The low potential is due to the low particulate loading indicative of a low potential to emit (PTE) from this unit. This unit has a PTE of 3.9 tons per year. This is based on the 0.9 lb/hr emission limit and 8,760 hours of operation per year. [Comment last updated on 5/05/2003]

7. Comment on an item originating in DAQE-AN0917019-02 regarding Salt Cooler (Unit BH-501)

Removal of installation notice requirement: GSLM submitted notice that BH-501 has been installed in a letter dated 1/29/03, copy received 5/1/03 by D. Olson. The installation notice requirement for this unit has now been fulfilled, and the requirement is no longer necessary. [Comment last updated on 5/05/2003]

8. Comment on an item originating in DAQE-AN0917020-03 regarding permitted source (Source-wide)

Stack test requirement corrections: The previous revision of this permit contained stack test language for BH-501 that is not represented in AN0917020-03. The language has been updated. Specifically, test prior notification has been shortened to 30 days from 45 days prior to the test, and "Test Conditions" has been changed to eliminate the "110% of rate" language. This monitoring has also been applied to the new BH-005. [Comment last updated on 5/05/2003]

9. Comment on an item originating in DAQE-AN0917020-03 regarding Emergency Diesel Generator (Unit GENSET)

Opacity limit: The 10% opacity limit on this unit was not included in earlier versions of this permit. The oversight has been corrected in this permit. [Comment last updated on 5/07/2003]